

So much for the Institute ; but a great deal might be added as to the Garden and its greenhouses, which are rich in interesting plants.² Classic plants are a *Chamærops humilis* L. var. *arborescens*, 9.5^m high, planted about 1585, and visited September 27, 1796, by Goethe, wherefore it is known as "Goethe's palm tree;" a *Tecoma grandiflora* Del., admired by Goethe for its beautiful flowering; a very old *Vitex Agnus-castus* L. (about 345 years old); an *Araucaria excelsa* R. Br. 20^m high, kept in a special greenhouse; many very beautiful trees (*Gymnocladus Canadensis* Lam., *Gingko biloba* L., *Diospyrus Lotus* L., *Carya olivæformis* Nutt., etc.). The greenhouses also are furnished with beautiful plants, among them an *Astrocaryon Chonta* Mart., a *Cycas circinalis* L., a *Cycas revoluta* Thunb., a *Pandanus utilis* Bory, a *Livistona australis* R. Br., many Cactaceæ and Orchideæ.

More than 5700 plants are cultivated in pots, to which we must add 110 old trees in the open air, 412 younger trees and shrubs, and 26 old greenhouse trees. — J. B. DETONI, *Padua, Italy.*

CONTRIBUTIONS FROM MY HERBARIUM.

Crataegus Sauratonæ, n. sp. — A small tree 3-4^m in height, with an oval crown and ascending or spreading branches, the branches generally very crooked, as well as the slender twigs; twigs ash-gray in color, and armed, though sparingly, with stout gray or reddish spines, the twig of the season glabrous and red-brown: leaves glabrous, 2-5^{cm} long, obovate or elliptic, or rhombic-ovate, acute and sharply serrate above the middle, mostly entire towards the narrow base, with three or four pairs of prominent veins; the slender petiole 0.5-1^{cm} long; stipules, bud scales, and floral bracts not conspicuously enlarging, and early deciduous: flowers in rather small glabrous corymbs; sepals entire, lanceolate, glabrous; pedicels 1.5-3^{cm} long, glabrous, the red fruit about 12^{mm} in diameter, or more; styles four or five.

Related to *Crataegus collina* Chapm., and separated from it by having smaller glabrous foliage, sharply serrate leaves, and larger fruit. This species has been collected in wet flats along streams in the Sauraton mountains of North Carolina; on the tributaries of the Neuse river, in Granville county, N. C.; and along streams in Caswell county, N. C.; growing with *Crataegus viridis* L., the white oak, and shag-bark hickory.

² For the accounts of these see R. de Visiani: *Di alcune piante storiche del giardino di Padova.* Padova, 1856. — G. B. DeToni: *Alberi e frutici ragguardevoli nei giardini di Padova.* Padova, 1887.

CRATAEGUS COLLINA Chapman, which has been reported by Mr. C. D. Beadle from the mountains of North Carolina, is not uncommon in that state as far eastward as Durham county, generally growing along the edges of fields or in coppice woods.

CRATAEGUS VAILIAE Britton seems to be quite distinct from the closely related *C. uniflora* Moench., often having long, erect, virgate branches, and becoming a tall shrub; while *C. uniflora* is generally lower, seldom more than 1^m in height, with spreading or horizontal branches. It is found in North Carolina as far eastward as Durham and Raleigh.

Crataegus Chapmani (Beadle), n. comb. *Crataegus tomentosa* *Chapmani* Beadle, BOT. GAZ. 25: 36. 1898. This tree is clearly worthy of specific rank. The much broader leaves and more prominent veins, smaller fruit in larger corymbs, and more slender spines separate it at once from all forms of *C. tomentosa*. In leaf characters and especially in the numerous pairs of prominent veins there is much resemblance to *C. punctata* Jacq. I find *Crataegus Chapmani* to be not uncommon in Ashe county, N. C., and Grayson county, southwestern Virginia.

FRAXINUS PROFUNDA Bush.—This tree has hitherto been reported only from the lower part of the Mississippi valley and the Gulf region. I have observed it, however, in a few places along the Atlantic coast as far north as Great Pungo swamp, Washington county, N. C. So far as noticed on the Atlantic coast the tree is confined to the largest river swamps, and the deeper flat swamps with stiff soils, growing with oaks, hickory, and occasionally loblolly pine.

QUERCUS TEXANA Buckl.—I reported this tree as occurring east of the Alleghany mountains, in this journal two years ago (24: 376. 1897) in the Piedmont region of the Carolinas and Virginia. I have subsequently detected it on the Atlantic coastal plain, in Onslow county, N. C., within twenty miles of the Atlantic coast, where I saw a magnificent group of trees, some of the specimens being 35^m high, and more than 1^m in diameter.

HICORIA CAROLINAE-SEPTENTRIONALIS Ashe.—This tree proves to be not uncommon in certain portions of the Piedmont regions of the south Atlantic states. It prefers dry, rocky soils, steep declivities, and the crests of sandy ridges, though it occasionally enters lowlands. Along a narrow range of low slaty and rocky hills which extends with interruptions from Maryland to middle South Carolina the tree is fre-

quent; while in central and northwestern Georgia it is more common, and it occurs, though locally, in middle Tennessee.

FOTHERGILLA MONTICOLA Ashe.—The recent discovery of this local shrub at Chapel Hill, N. C., makes another station for it about 150 miles east of any previously reported locality. It grows there on a rocky hillside with *Rhododendron Catawbiense* Mx., and the chestnut oak. This is also the most eastward station for *Rhododendron Catawbiense* Mx. Dr. J. K. Small reported Crowder's mountain as being the most eastward station, but Chapel Hill is 140 miles further east, and has an elevation 1000 feet less than that of Crowder's mountain, being only 500 feet above sea level. The *Systematic Flora* (2: 42) gives the plant as occurring only at high elevations. This rhododendron is also found abundantly along the Oconneechee hills, twelve miles northwest of Chapel Hill, and at a slightly higher elevation. With it at this place is *Aconitum reclinatum* Gray, one of the most local species of the genus, and hitherto supposed to be confined to higher elevations, 5000–6500 feet, in the southern Alleghanies.—W. W. ASHE, *Biltmore, N. C.*

TWO NEW MICHIGAN FUNGI.

Tubaria luteoalba, n. sp.—Pileus 1–2.5^{cm} broad, thin, convex, becoming plane, finally centrally depressed, the margin sometimes becoming partly or wholly upturned, hygrophorous, white, creamy or yellowish, silky-squamulose near the margin from the remains of the veil, margin striate when moist: stem 1.5–2^{cm} long, 0.3–0.5^{cm} thick, hollow, slightly enlarged at base, whitish, silky, downy at base, often curved: lamellæ adnato-decurrent, 0.2–0.4^{cm} broad, subdistant, at first nearly white but soon ochraceous from the spores: spores elliptical, 4–5 × 6–8 μ.—On decaying stems and leaves of weeds and grass, on low wet ground near Michigan Agricultural College, April 1897.

This fungus resembles *T. furfuracea* in form and habit, but is smaller, lighter in color, and in every way more delicate than that species. The spores are also smaller and lighter in color. From *T. autochthona* it differs in its larger size, form of stem, and habitat. The veil sometime forms a fibrous zone on the stem. It has not been collected in any other locality.

Galera crispa, n. sp.—Pileus 1.5–3.5^{cm} broad, membranaceous, persistently conico-campanulate, subacute, uneven and somewhat rivulose,